

#### ABSTRACT OF THE DISCLOSURE

The invention relates to a device (16) which is used to measure at least one component of a magnetic field. The inventive device comprises a magnetoresistive sensor (102) and a measuring chain (28). According to the invention, the input of the aforementioned measuring chain is connected to the magnetoresistive sensor (102), while the output thereof is intended to supply information that is representative of the magnetic field in the region of the sensor. In addition, the measuring chain (28) comprises means (136) for isolating a frequency component of the signal from the sensor representative of the magnetic field for a unique pre-determined frequency (FI).